

ABSTRACT OF THE INVENTION

5 A vaporizer system for vaporizing solid and/or liquid chemical source materials under uniform heating conditions within the vaporizer system, with reduced condensation of vaporized source materials and minimization of "cold spots" within the vaporizer, to provide a substantially continuous flow of vapor to a downstream implantation or deposition (e.g., MOCVD) system. The vaporizer includes a thermally conductive block having a multiplicity of elongated wells formed therein for holding a vapor source material. Within the thermally conductive block is an interior volume communicating with the elongated wells. The thermally conductive block is sealed to form a closed vessel and heat is applied thereto to evenly heat all the elongated wells simultaneously and vaporize the source material therein.

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